

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/058234 A2

(51) International Patent Classification⁷:

A61K

(21) International Application Number:

PCT/US2004/041374

(22) International Filing Date:

13 December 2004 (13.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/528,892 11 December 2003 (11.12.2003) US

(71) Applicant (for all designated States except US): **YALE UNIVERSITY [US/US]**; Two Whitney Avenue, New Haven, CT 06511 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MA, Bing [—/US]**; Two Whitney Avenue, New Haven, CT 06511 (US). **ELIAS, Jack, A. [US/US]**; Two Whitney Avenue, New Haven, CT 06511 (US).

(74) Agent: **VEITENHEIMER, Erich, E.; Morgan, Lewis & Bockius LLP, 1111 Pennsylvania Avenue, NW, Washington, DC 20004 (US)**.

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS RELATING TO CCR5 ANTAGONIST, IFN- γ AND IL-13 INDUCED INFLAMMATION

(57) Abstract: The present invention includes compositions and methods for the treatment of Th1 and/or Th2 mediated inflammatory diseases, relating to inhibiting CCR5. This is because the present invention demonstrates, for the first time, that expression of IFN-7, IL13, and CCR5, mediates and/or is associated with Th1 and/or Th2 inflammatory diseases and that inhibiting CCR5 treats, and even prevents, the diseases. Thus, the Invention relates to the novel discovery that inhibiting CCR5 treats and prevents Th1 and/or Th2 mediated inflammatory disease.



WO 2005/058234 A2